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December 5, 2005

TO: Mr. Russell Hart, RPM
United States Environmental Protection Agency
Region V
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

FROM: Mr. David Curnock, PM, SECOR International Incorporated

RE: **MONTHLY PROGRESS REPORT/MEMORANDUM**
Area 9/10 Remedial Design
Southeast Rockford Groundwater Contamination Superfund Site
Rockford, Illinois

Copies: Mr. Thomas Turner, Regional Counsel, USEPA Region V
Mr. Scott Moyer, Hamilton Sundstrand/United Technologies Corporation
Ms. Kathleen McFadden, United Technologies Corporation
Mr. Thomas Williams, PM, IEPA
Mr. Terry Ayers, IEPA

CURRENT MONTH PROJECT ISSUES/STATUS: *(activities, meetings, deliverables, etc.)*

Activities conducted in November 2005 consisted of the continuation of Pre-Design Investigation and conceptual design activities. The area of focus at this time with respect to the overall Remedial Design is a portion of the area beneath the Hamilton Sundstrand (HS) Plant #1. There has also been active free product recovery in the South Alley area of the site.

The area beneath the HS facility has been identified as a location of potential source material based on down-gradient groundwater monitoring results. The most likely location of the potential source material is associated with the former area of underground storage tanks (USTs) which were in the central portion of the plant south of the loading dock area. With access to the inside of the building unavailable, alternative means have been explored and horizontal drilling appears to be the most effective method of infrastructure installation.

A preliminary conceptual design for horizontal wells and pilot testing letter was submitted to USEPA and IEPA in May 2005. This letter provided an overview of the currently envisioned potential horizontal well and pilot testing treatment corridor. The plan outlined the optimal installation and treatment area without consideration of access constraints (both off-site and on the property).

Pilot testing of the horizontal wells will be a necessary part of the overall remedial design. The horizontal air sparge (AS) and soil vapor extraction (SVE) wells that are planned for pilot testing will likely become part of the final remedial design. This is consistent with a final remedial system design utilizing the Record of Decision (ROD) prescribed technologies for Area 9/10.

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Off-site access for horizontal drilling will be required. Access to the property to the south of the plant (2525 11th Street) and beneath the Illinois Central Railroad (ICR) spur line north of the plant will be necessary. Initial contact with ICR had been made related to the Outside Storage Container Area (OSA) source removal activities. As this initiative is now on hold ICR access for the horizontal wells is being pursued.

To facilitate the preparation of the work plan for the AS and SVE horizontal well installation and pilot testing, the installation of a horizontal groundwater monitoring well beneath the facility has been proposed. Knowledge of the concentrations of various constituents of concern in groundwater will assist in the pilot test work plan development effort.

A brief horizontal groundwater monitoring well work plan is presently under internal review. The plan outlines the scope of work to be undertaken and will provide specific well installation, well development, and the baseline sampling to be performed. If access is denied, HS will request assistance from USEPA and/or IEPA in this matter.

If access conditions indicate that logistic modifications are required, alternate locations and alignments may be developed. The horizontal groundwater monitoring well work plan will be submitted after access from offsite parties (2525 11th Street owner and ICR) is assured. The data from the horizontal groundwater monitoring well will be used as input for the development of the AS and SVE horizontal well pilot test infrastructure and test procedures.

The operation and monitoring of hydrocarbon recovery of LNAPL (JP-4) from the recovery systems in the south alley continues. Based on water level measurements taken from monitoring wells, there has been a noticeable drop in the elevation of the water table over the summer which has continued into the fall. The lowering of the water table is attributable to the general lack of any significant rainfall during this period. Rockford is currently experiencing a significant rainfall deficit for 2005. The lowering of the water table has produced conditions which have resulted in separate phase hydrocarbons to be observed in the recovery wells in the South Alley and were first observed this year in September.

Since September the recovery well operation has been closely monitored for product recovery as no product was observed in these wells over the past several quarterly gauging events. Over this period significant maintenance activities have been performed on the recovery system components. These activities have included the blowing down of all the air and product lines with compressed air, installation of new air and product lines in well RW-3R, sending the RW-3R FAP pump to the manufacturer for reconditioning and reinstallation, adjusting the skimmer floats to lower water table conditions, replacing weathered line connections, and ordering of a new FAP pump to replace the old recovery pump in the well RW-2 which was not replaced last year. As a result of these activities the measured thickness of free product in the wells has been reduced from a maximum measured thickness of 1.21 feet to 0.10 feet in RW-1 on November 17th, 2005. Similarly the product thickness at RW-3R has been reduced from a maximum measured thickness of 1.20 feet to 0.10 feet on November 17th, 2005. Over the period of time from September through November approximately 74 gallons of product have been removed by the recovery wells.

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FUTURE PROJECT ISSUES/STATUS: *(activities, meetings, deliverables, etc.)*

Future project activities anticipated for December 2005 and beyond include:

- Continue to collect water levels from the groundwater monitoring network on a periodic basis (scheduled for December).
- Finalize the brief scope of work/work plan for the installation, development, and baseline sampling of a horizontal groundwater monitoring well.
- Continue discussion with regard to site access with ICR for the horizontal well installation. Initial contact has been made.
- Finish compiling the Pre-Design Investigation data into the Data Summary Report. This report will include boring logs, figures, groundwater flow information, and all laboratory analyses undertaken as part of the Pre-Design Investigation. A draft report is being assembled.
- Monitoring and evaluation of LNAPL (JP-4) presence and recovery at the eastern end of the South Alley will continue and replace the existing RW-2 pump.
- Continue discussions with the new property owner to the south (Mr. Ting located in Minneapolis, Minnesota is the Principal Partner of the trust) and ICR regarding access for horizontal well installations, pilot test access, and longer term AS and SVE system operation.

HS is/will pursue access as is currently deemed necessary with these off-site entities. If it becomes apparent that progress towards access is not being made, access is being denied, or unreasonable access conditions are being imposed, HS will inform USEPA and seek assistance for reasonable resolution.

SAMPLE/TEST DATA SUBMITTALS:

The September 2005 (draft) Potentiometric Surface Map is provided as Figure 1.

RD SCHEDULE UPDATE: *(attach updated schedule as necessary)*

As the activities associated with the Pre-Design Investigation portion of the Remedial Design (RD) continue, the overall schedule continues to be revised. A scope of work concerning the source mass reduction (by excavation) of near surface impacted soils in the OSA was submitted to the USEPA and IEPA in April 2005. Based on comments and responses, the (technical) work plan was approved with conditions in August. It was identified at that time that there was USEPA concern regarding their authority to administer these activities based on the present administrative order on consent. Proposed text modifications were prepared by HS and submitted to USEPA. USEPA determined in October 2005 that the OSA source mass reduction activity was not within the administrative capacity of the existing AOC. As a result the source mass reduction activity has been placed on hold. HS is presently evaluating the alternatives (separate order for the OSA work or at such time as Remedial Action is undertaken) with regard to the OSA work.

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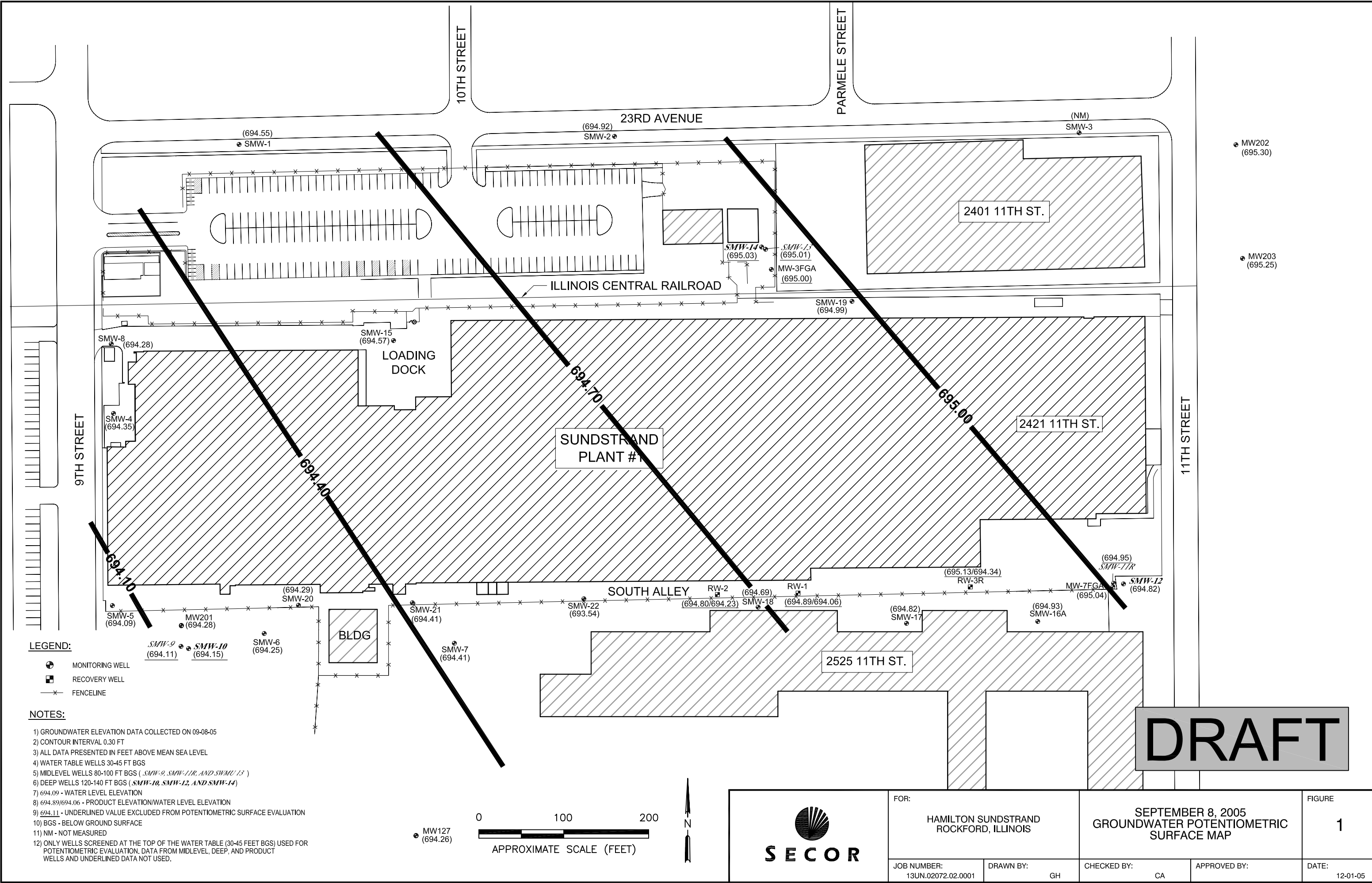
Access to potential source materials beneath the HS facility building will require the use of horizontal drilling. As mentioned previously, off-site access will be required for implementation of this technique. Access to off-site properties presents a potential to affect the schedule for implementation. HS is working on logistical issues associated with this drilling technology and will continue to work with the USEPA on keeping the RD efforts for Area 9/10 moving forward in a timely and reasonable fashion.

REALIZED/ANTICIPATED PROBLEM CONDITIONS:

None.

PERSONNEL CHANGES:

None.

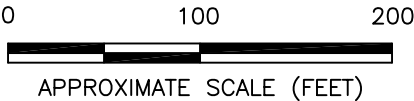


LEGEND:

- MONITORING WELL
- RECOVERY WELL
- x- FENCELINE

NOTES:

- 1) GROUNDWATER ELEVATION DATA COLLECTED ON 09-08-05
- 2) CONTOUR INTERVAL 0.30 FT
- 3) ALL DATA PRESENTED IN FEET ABOVE MEAN SEA LEVEL
- 4) WATER TABLE WELLS 30-45 FT BGS
- 5) MIDLEVEL WELLS 80-100 FT BGS (*SMW-9, SMW-11R, AND SMW-13*)
- 6) DEEP WELLS 120-140 FT BGS (*SMW-10, SMW-12, AND SMW-14*)
- 7) 694.09 - WATER LEVEL ELEVATION
- 8) 694.89/694.06 - PRODUCT ELEVATION/WATER LEVEL ELEVATION
- 9) 694.11 - UNDERLINED VALUE EXCLUDED FROM POTENTIOMETRIC SURFACE EVALUATION
- 10) BGS - BELOW GROUND SURFACE
- 11) NM - NOT MEASURED
- 12) ONLY WELLS SCREENED AT THE TOP OF THE WATER TABLE (30-45 FEET BGS) USED FOR POTENTIOMETRIC EVALUATION. DATA FROM MIDLEVEL, DEEP, AND PRODUCT WELLS AND UNDERLINED DATA NOT USED.



FOR: HAMILTON SUNDSTRAND ROCKFORD, ILLINOIS		SEPTEMBER 8, 2005 GROUNDWATER POTENTIOMETRIC SURFACE MAP		FIGURE 1
JOB NUMBER: 13UN.02072.02.0001	DRAWN BY: GH	CHECKED BY: CA	APPROVED BY:	DATE: 12-01-05